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(54) Title: SILICONE RESIN FOR DRILLING FLUID LOSS CONTROL

(57) Abstract: A silicone MQ resin based composition provides the oil industry with Fluid Loss Control (FLC) additives for water based drilling muds which are *non-damaging*. The composition is capable of achieving zero fluid seepage through filter cake, and a short build time for the initial filter cake, while not reducing the return flow of oil from producing formations. The composition is stable in saturated salt at 120 °C and elevated pressures. The composition comprises solid particles of silicone resin with a glass transition temperature more than 70 °C, and it contains solid particles of silicone resin with a particle size distribution in which (i) at least 90 volume percent of solid particles of silicone resin have an average major axis diameter of 40 µm or less than 40 µm, and (ii) at least 10 volume percent of solid particles of silicone resin have an average major axis diameter of 2 µm or less.

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